Title (en)

Electrolytic dissolution process for platinum, platinum metal impurities and/or platinum alloys

Title (de)

Elektrolytisches Verfahren zum Lösen von Platin, Platinmetallverunreinigungen und/oder Platinmetallegierungen

Title (fr)

Procédé électrolytique de dissolution de platine d'impuretés métalliques du platine et/ou d'alliages métalliques du platine

Publication

EP 0607535 B1 19960703 (DE)

Application

EP 93118980 A 19931125

Priority

DE 4243698 A 19921218

Abstract (en)

[origin: US5423957A] The electrolytic process for dissolving platinum, platinum metal impurities and/or platinum metal alloys, in particular with contents of Rh, Pd, Ir, Au and Ag, in 6 to 8N aqueous hydrochloric acid is characterized by a dissolution process that takes place in an electrolysis cell subdivided by a cation exchanger membrane into an anode and cathode compartment containing anode and cathode respectively, and, if appropriate, in the presence of platinum metal salts or platinum metal acids, at temperatures between 50 DEG and 110 DEG C., under potentiostatic or voltage-controlled conditions in the range of 2.5 V to 8 V and under a current density of 0.3 to 7.0 A/dm2. The potential across the anode and the cathode is controlled so that chlorine gas is generated and the anode is contacted with the aqueous hydrochloric acid solution and the chlorine gas in impulse-form.

IPC 1-7

C25B 1/00; C01G 55/00

IPC 8 full level

C25C 1/00 (2006.01); **C01G 55/00** (2006.01); **C25B 1/00** (2006.01); **C25C 1/20** (2006.01)

CPC (source: EP US)

C22B 11/04 (2013.01 - EP US); **C25B 1/00** (2013.01 - EP US)

Cited by

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AT CH DE FR GB IT LI

DOCDB simple family (publication)

US 5423957 A 19950613; AT E140043 T1 19960715; CA 2111791 A1 19940619; CA 2111791 C 20031104; DE 4243698 C1 19940324; DE 59303139 D1 19960808; EP 0607535 A1 19940727; EP 0607535 B1 19960703; FI 100606 B 19980115; FI 935660 A0 19931216; FI 935660 A 19940619; JP 3229988 B2 20011119; JP H06280076 A 19941004; RU 2094534 C1 19971027; ZA 938996 B 19940803

DOCDB simple family (application)

US 17042393 A 19931220; AT 93118980 T 19931125; CA 2111791 A 19931217; DE 4243698 A 19921218; DE 59303139 T 19931125; EP 93118980 A 19931125; FI 935660 A 19931216; JP 34328993 A 19931217; RU 93056628 A 19931217; ZA 938996 A 19931201